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09/520,601	03/08/2000	Kent K. Leung	CISCP144/2133	2012

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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/520,601	LEUNG ET AL.
	Examiner	Art Unit
	Marceau Milord	2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 March 2000</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-43</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-43</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>08 March 2000</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2-3</u> .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

2.   Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frid et al

(US Patent No 6137791) in view of Okanoue et al (US Patent No 6122268).

Regarding claim 1, Frid et al discloses a method of processing a registration request (figs.

3, 5, 8) in a Foreign Agent (310 of figs. 3, 5) comprising: receiving a registration request

identifying a Home Agent (320 of figs. 3, 5 and 8) associated with the mobile node, the

registration request further including a NAI associated with the mobile node (col. 2, line 52- col.

3, line 21; col. 4, lines 22-66); providing a registration request; and sending the registration

request to the Home Agent (320 of figs. 3, 5 and 8) associated with the mobile node (col. 6, lines

33-66; col. 8, line 24-col. 9, line 21; col. 10, lines 14-45; col. 10, line 51- col. 11, line 30).

However, Frid et al does not specifically disclose the steps of providing a sub-NAI in the

registration request, the sub-NAI uniquely identifying a session associated with the mobile node.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method

for allocating a geographical identifier, which is executed in a network for supporting a plurality

of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the

sub network 110 allocates the same geographical identifier depending on the sub network 110 to

the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the

movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to

periodically notify a destination address of a link layer header of a broadcasting address, a

destination address of a network layer header of a broadcasting address, a transmitting address of

a beacon containing location information having the agent address used as the link layer and the

network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply the technique of Okanoue to the system of Frid in order to provide a node at

every sub network for allocating a same geographical identifier to a plurality of movable hosts

connected to a sub network.

Regarding claim 2, Frid et al discloses a method of sending a registration request (figs. 3,

5, 8), in a mobile node, comprising: composing a registration request identifying a Home Agent

(320 of figs. 3, 5 and 8) associated with the mobile node, the registration request further

including a NAI associated with the mobile node; and sending the registration request (col. 2,

line 52- col. 3, line 21; col. 4, lines 22-66; col. 6, lines 33-66).

However, Frid et al does not specifically disclose the features of a sub-NAI that uniquely

identifies a session associated with the mobile node; and sending the registration request.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method

for allocating a geographical identifier, which is executed in a network for supporting a plurality

of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the

sub network 110 allocates the same geographical identifier depending on the sub network 110 to

the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the

movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to

periodically notify a destination address of a link layer header of a broadcasting address, a

destination address of a network layer header of a broadcasting address, a transmitting address of

a beacon containing location information having the agent address used as the link layer and the

network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply the technique of Okanoue to the system of Frid in order to provide a node at

every sub network for allocating a same geographical identifier to a plurality of movable hosts

connected to a sub network.

Regarding claim 3, Frid et al as modified discloses a method of sending a registration

request (figs. 3, 5, 8), in a mobile node, wherein the NAI identifies a user ID submitted during

PPP authentication (col. 2, line 60- col. 3, line 15; col. 6, lines 33-66; col. 8, lines 24-60).

Regarding claim 4, Frid et al as modified discloses a method of sending a registration

request (figs. 3, 5, 8), wherein the NAI is an identifier submitted for authentication of the mobile

node (col. 6, lines 33-66; col. 8, lines 24-60).

Regarding claim 5, Frid et al as modified discloses a method of sending a registration

request (figs. 3, 5, 8), wherein the NAI is an e-mail address or a user ID submitted in an

application layer authentication (col. 6, lines 33-66; col. 8, lines 24-60; col. 10, lines 14-45).

Claim 6 contains similar limitations addressed in claim 1, and therefore is rejected under

a similar rationale.

Regarding claim 7, Frid et al as modified discloses a method of sending a registration request (figs. 3, 5, 8), comprising: detecting the session; wherein composing the registration request is performed in response to the detection of the session (col. 10, line 28- col. 11, line 30).

Regarding claim 8, Frid et al as modified discloses a method of sending a registration request (figs. 3, 5, 8), wherein the session is associated with a device that is separate from the mobile node (col. 6, lines 33-66; col. 8, lines 24-60).

Regarding claim 9, Frid et al as modified discloses a method of sending a registration request (figs. 3, 5, 8), wherein the session is associated with an application running on the mobile node (col. 11, line 32- col. 12, line 30; col. 12, lines 13-64).

Claims 10-11 contain similar limitations addressed in claim 1, and therefore are rejected under a similar rationale.

Regarding claim 12, Frid et al discloses a method of registering a session (figs. 3, 5, 8) with a Home Agent (320 of figs. 3, 5, 8), in a Foreign Agent (310 of fig. 5), the method comprising: receiving a registration request identifying a Home Agent (320 of figs. 3, 5 and 8) associated with the mobile node, the registration request further including a NAI identifying a user ID (col. 2, line 52- col. 3, line 21; col. 4, lines 22-66; col. 6, lines 33-66); and sending the registration request to the Home Agent (col. 8, lines 24-66; col. 10, lines 12-60; col. 11, lines 8-41).

However, Frid et al does not specifically disclose the features of a sub-NAI that uniquely identifies a session associated with the mobile node.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method for allocating a geographical identifier, which is executed in a network for supporting a plurality

of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the

sub network 110 allocates the same geographical identifier depending on the sub network 110 to

the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the

movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to

periodically notify a destination address of a link layer header of a broadcasting address, a

destination address of a network layer header of a broadcasting address, a transmitting address of

a beacon containing location information having the agent address used as the link layer and the

network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply the technique of Okanoue to the system of Frid in order to provide a node at

every sub network for allocating a same geographical identifier to a plurality of movable hosts

connected to a sub network.

Regarding claim 13, Frid et al as modified discloses method of registering a session (figs.

3, 5, 8) with a Home Agent (320 of figs. 3, 5, 8), in a Foreign Agent (310 of fig. 5), wherein the

NAI is a user ID submitted during PPP authentication (col. 2, line 60- col. 3, line 15; col. 6, lines

33-66; col. 8, lines 24-60).

Regarding claim 14, Frid et al as modified discloses method of registering a session (figs.

3, 5, 8) with a Home Agent (320 of figs. 3, 5, 8), in a Foreign Agent (310 of fig. 5), wherein the

NAI is an identifier submitted for authentication of the mobile node (col. 6, lines 33-66; col. 8,

lines 24-60).

Regarding claim 15, Frid et al as modified discloses method of registering a session (figs.

3, 5, 8) with a Home Agent (320 of figs. 3, 5, 8), in a Foreign Agent (310 of fig. 5), wherein the

NAI is an e-mail address or a user ID submitted in an application layer authentication (col. 6, lines 33-66; col. 8, lines 24-60; col. 10, lines 14-45).

Claim 16 contains similar limitations addressed in claim 12, and therefore is rejected under a similar rationale.

Regarding claim 17, Frid et al as modified discloses method of registering a session (figs. 3, 5, 8) with a Home Agent (320 of figs. 3, 5, 8), in a Foreign Agent (310 of fig. 5), wherein the session is associated with a device that is separate from the mobile node (col. 6, lines 33-66; col. 8, lines 24-60).

Regarding claim 18, Frid et al as modified discloses method of registering a session (figs. 3, 5, 8) with a Home Agent (320 of figs. 3, 5, 8), in a Foreign Agent (310 of fig. 5), wherein the session is associated with an application running on the mobile node (col. 11, line 32- col. 12, line 30; col. 12, lines 13-64).

Regarding claim 19, Frid et al discloses a method of registering a session (figs. 3, 5, 8) associated with a mobile node in a Home Agent (320 of figs. 3, 5, 8), comprising: receiving a registration request, the registration request including a NAI identifying a mobile node (col. 2, line 52- col. 3, line 21; col. 4, lines 22-66); authenticating the mobile node using the NAI; and composing a registration reply including the NAI identifying the mobile node (col. 6, lines 33-66; col. 8, line 24-col. 9, line 21; col. 10, lines 14-45; col. 10, line 51- col. 11, line 30).

However, Frid et al does not specifically disclose the features of a sub-NAI that uniquely identifies the session associated with the NAI.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method for allocating a geographical identifier, which is executed in a network for supporting a plurality

of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the

sub network 110 allocates the same geographical identifier depending on the sub network 110 to

the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the

movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to

periodically notify a destination address of a link layer header of a broadcasting address, a

destination address of a network layer header of a broadcasting address, a transmitting address of

a beacon containing location information having the agent address used as the link layer and the

network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply the technique of Okanoue to the system of Frid in order to provide a node at

every sub network for allocating a same geographical identifier to a plurality of movable hosts

connected to a sub network.

Regarding claim 20, Frid et al as modified discloses a method of registering a session

(figs. 3, 5, 8) associated with a mobile node in a Home Agent (320 of figs. 3, 5, 8), wherein the

NAI is a user ID submitted during PPP authentication (col. 2, line 60- col. 3, line 15; col. 6, lines

33-66; col. 8, lines 24-60).

Claims 21-22 contain similar limitations addressed in claim 19; and therefore are rejected

under a similar rationale.

Regarding claim 23, Frid et al as modified discloses a method of registering a session

(figs. 3, 5, 8) associated with a mobile node in a Home Agent (320 of figs. 3, 5, 8), wherein the

session is associated with a device that is separate from the mobile node (col. 6, lines 33-66; col.

8, lines 24-60).

Regarding claim 24, Frid et al as modified discloses a method of registering a session

(figs. 3, 5, 8) associated with a mobile node in a Home Agent (320 of figs. 3, 5, 8), wherein the

session is associated with an application running on the mobile node (col. 11, line 32- col. 12,

line 30; col. 12, lines 13-64).

Regarding claims 25, 27-28, 31-34, Frid et al discloses a method of registering a session

(figs. 3, 5, 8) associated with a mobile node, in a Home Agent (320 of figs, 3, 5, 8) comprising:

receiving a registration request, the registration request including a NAI identifying a user ID

(col. 2, line 52- col. 3, line 21; col. 4, lines 22-66; col. 6, lines 33-66); obtaining an IP address

associated with the session; composing a registration reply including the IP address, the NAI

identifying the user ID ; and sending the registration reply (col. 6, lines 33-66; col. 8, line 24-col.

9, line 21; col. 10, lines 14-45; col. 10, line 51- col. 11, line 30).

However, Frid et al does not specifically disclose the features of a sub-NAI that uniquely

identifies a session associated with the NAI.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method

for allocating a geographical identifier, which is executed in a network for supporting a plurality

of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the

sub network 110 allocates the same geographical identifier depending on the sub network 110 to

the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the

movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to

periodically notify a destination address of a link layer header of a broadcasting address, a

destination address of a network layer header of a broadcasting address, a transmitting address of

a beacon containing location information having the agent address used as the link layer and the

network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply the technique of Okanoue to the system of Frid in order to provide a node at

every sub network for allocating a same geographical identifier to a plurality of movable hosts

connected to a sub network.

Regarding claim 26, Frid et al as modified discloses a method of registering a session

(figs. 3, 5, 8) associated with a mobile node, in a Home Agent (320 of figs, 3, 5, 8) wherein the

NAI identifies a user ID submitted during PPP authentication (col. 2, line 60- col. 3, line 15; col.

6, lines 33-66; col. 8, lines 24-60).

Regarding claim 29, Frid et al as modified discloses a method of registering a session

(figs. 3, 5, 8) associated with a mobile node, in a Home Agent (320 of figs, 3, 5, 8) wherein the

session is associated with a device that is separate from the mobile node (col. 6, lines 33-66; col.

8, lines 24-60).

Regarding claim 30, Frid et al as modified discloses a method of registering a session

(figs. 3, 5, 8) associated with a mobile node, in a Home Agent (320 of figs, 3, 5, 8) wherein the

session is associated with an application running on the mobile node (col. 11, line 32- col. 12,

line 30; col. 12, lines 13-64).

Regarding claims 35, 37, Frid et al discloses a method of processing a registration reply

packet (figs. 3, 5, 8) received from a mobile node in a Foreign Agent (310 of figs. 3 and 5),

comprising: receiving a registration reply including an IP address associated with the mobile

node, a NAI identifying a user ID (col. 2, line 52- col. 3, line 21; col. 4, lines 22-66); updating a

visitor table with a mapping of the NAI, and the IP address associated with the mobile node; and

sending the registration reply to the mobile node (col. 6, lines 33-66; col. 8, line 24-col. 9, line 21; col. 10, lines 14-45; col. 10, line 51- col. 11, line 30).

However, Frid et al does not specifically disclose the features of a sub-NAI that uniquely identifies a session associated with the NAI.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method for allocating a geographical identifier, which is executed in a network for supporting a plurality of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the sub network 110 allocates the same geographical identifier depending on the sub network 110 to the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to periodically notify a destination address of a link layer header of a broadcasting address, a destination address of a network layer header of a broadcasting address, a transmitting address of a beacon containing location information having the agent address used as the link layer and the network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Okanoue to the system of Frid in order to provide a node at every sub network for allocating a same geographical identifier to a plurality of movable hosts connected to a sub network.

Regarding claim 36, Frid et al as modified discloses a method of processing a registration reply packet (figs. 3, 5, 8) received from a mobile node in a Foreign Agent (310 of figs. 3 and 5), wherein the NAI identifies a user ID submitted during PPP authentication (col. 2, line 60- col. 3, line 15; col. 6, lines 33-66; col. 8, lines 24-60).

Regarding claim 38, Frid et al as modified discloses a method of processing a registration reply packet (figs. 3, 5, 8) received from a mobile node in a Foreign Agent (310 of figs. 3 and 5), wherein the session is associated with a device that is separate from the mobile node (col. 6, lines 33-66; col. 8, lines 24-60).

Regarding claim 39, Frid et al as modified discloses a method of processing a registration reply packet (figs. 3, 5, 8) received from a mobile node in a Foreign Agent (310 of figs. 3 and 5), wherein the session is associated with an application ruining on the mobile node (col. 11, line 32-col. 12, line 30; col. 12, lines 13-64).

Regarding claim 40, Frid et al discloses a computer-readable medium (figs. 3, 5, 8) for processing a registration request in a Foreign Agent (310 of figs. 3 and 5) comprising: Instructions for receiving a registration request identifying a Home Agent (320 of figs. 3, 5, 8) associated with the mobile node, the registration request further including a NAI associated with the mobile node (col. 2, line 52- col. 3, line 21; col. 4, lines 22-66); instructions for providing a sub-NAI in the registration request; and instructions for sending the registration request to the Home Agent (320 of figs. 3, 5, 8) associated with the mobile node (col. 6, lines 33-66; col. 8, line 24-col. 9, line 21; col. 10, lines 14-45; col. 10, line 51- col. 11, line 30).

However, Frid et al does not specifically disclose the features of a sub-NAI in the registration request, the sub-NAI uniquely identifying a session associated with the mobile node.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method for allocating a geographical identifier, which is executed in a network for supporting a plurality of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the sub network 110 allocates the same geographical identifier depending on the sub network 110 to

the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the

movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to

periodically notify a destination address of a link layer header of a broadcasting address, a

destination address of a network layer header of a broadcasting address, a transmitting address of

a beacon containing location information having the agent address used as the link layer and the

network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply the technique of Okanoue to the system of Frid in order to provide a node at

every sub network for allocating a same geographical identifier to a plurality of movable hosts

connected to a sub network.

Regarding claim 41, Frid et al discloses a Foreign Agent (310 of figs. 3 and 5) adapted

for registering a session with a Home Agent (320 of figs. 3 and 5), comprising: a processor; and

a memory, the memory storing therein: instructions for receiving a registration request

identifying a Home Agent (320 of figs. 3 and 5) associated with the mobile node (col. 2, line 52-

col. 3, line 21; col. 4, lines 22-66); the registration request further including a NAI identifying a

user ID; and instructions for sending the registration request to the Home Agent (320 of figs. 3,

5, 8; col. 6, lines 33-66; col. 8, line 24-col. 9, line 21; col. 10, lines 14-45; col. 10, line 51- col.

11, line 30).

However, Frid et al does not specifically disclose the features of a sub-NAI that uniquely

identifies a session associated with the NAI.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method

for allocating a geographical identifier, which is executed in a network for supporting a plurality

of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the

sub network 110 allocates the same geographical identifier depending on the sub network 110 to

the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the

movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to

periodically notify a destination address of a link layer header of a broadcasting address, a

destination address of a network layer header of a broadcasting address, a transmitting address of

a beacon containing location information having the agent address used as the link layer and the

network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply the technique of Okanoue to the system of Frid in order to provide a node at

every sub network for allocating a same geographical identifier to a plurality of movable hosts

connected to a sub network.

Regarding claim 42, Frid et al discloses a computer-readable medium (figs. 3, 5, 8) for

registering a session associated with a mobile node in a Home Agent, (320 of figs. 3, 5, 8)

comprising: instructions for receiving a registration request, the registration request including a

NAI identifying a mobile node (col. 2, line 52- col. 3, line 21; col. 4, lines 22-66); instructions

for authenticating the mobile node using the NAI; and instructions for composing a registration

reply including the NAI identifying the mobile node (col. 6, lines 33-66; col. 8, line 24-col. 9,

line 21; col. 10, lines 14-45; col. 10, line 51- col. 11, line 30).

However, Frid et al does not specifically disclose the features of a sub-NAI that uniquely

identifies a session associated with the NAI.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method for allocating a geographical identifier, which is executed in a network for supporting a plurality of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the sub network 110 allocates the same geographical identifier depending on the sub network 110 to the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to periodically notify a destination address of a link layer header of a broadcasting address, a destination address of a network layer header of a broadcasting address, a transmitting address of a beacon containing location information having the agent address used as the link layer and the network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6; line 55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Okanoue to the system of Frid in order to provide a node at every sub network for allocating a same geographical identifier to a plurality of movable hosts connected to a sub network.

Regarding claim 43, Frid et al discloses a Home Agent (320 of figs. 3, 5 and 8) configured for registering a session associated with a mobile node, comprising: a processor; and a memory, the memory storing therein: instructions for receiving a registration request, the registration request including a NAI identifying a user ID (col. 2, line 52- col. 3, line 21; col. 4, lines 22-66); instructions for obtaining an IP address associated with the session; instructions for composing a registration reply including the IP address, the NAI identifying the user D; and instructions for sending the registration reply (col. 6, lines 33-66; col. 8, line 24-col. 9, line 21; col. 10, lines 14-45; col. 10, line 51- col. 11, line 30).

However, Frid et al does not specifically disclose the feature of a sub-NAI that uniquely identifies the session associated with the NAI.

On the other hand, Okanoue et al, from the same field of endeavor, discloses a method for allocating a geographical identifier, which is executed in a network for supporting a plurality of sub networks. When movable hosts 100, 101 moves to a sub network 110, an agent 120 of the sub network 110 allocates the same geographical identifier depending on the sub network 110 to the movable hosts 100 and 101 and stores logical identifiers and link layer addresses of the movable hosts 100 and 101 (col. 2, line 47- col. 3, line 49). Furthermore, the agent operates to periodically notify a destination address of a link layer header of a broadcasting address, a destination address of a network layer header of a broadcasting address, a transmitting address of a beacon containing location information having the agent address used as the link layer and the network layer headers (figs. 1-4; col. 4, line 15- col. 5, line 39; col. 5, line 51- col. 6, line 55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Okanoue to the system of Frid in order to provide a node at every sub network for allocating a same geographical identifier to a plurality of movable hosts connected to a sub network.

Conclusion

3.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Low et al US Patent No 6131095 discloses a method of accessing a target entity over a communication network employing a distributed database system.

Diachina et al US Patent No 6016428 discloses a method and device for storing and maintaining parameters associated with activities relating to a first channel while a mobile station is camped on or uses a second channel.

Voit US Patent No 6075783 discloses an Internet telecommunication system combining the capabilities of the Advanced Intelligent Network with those of the Internet work.

Chao et al US Patent No 6081507 discloses a method and apparatus for handling time stamp aging.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MARCEAU MILORD

                                                    Marceau Milord
                                                    Examiner
                                                    Art Unit 2682